

FIG.1

2/27

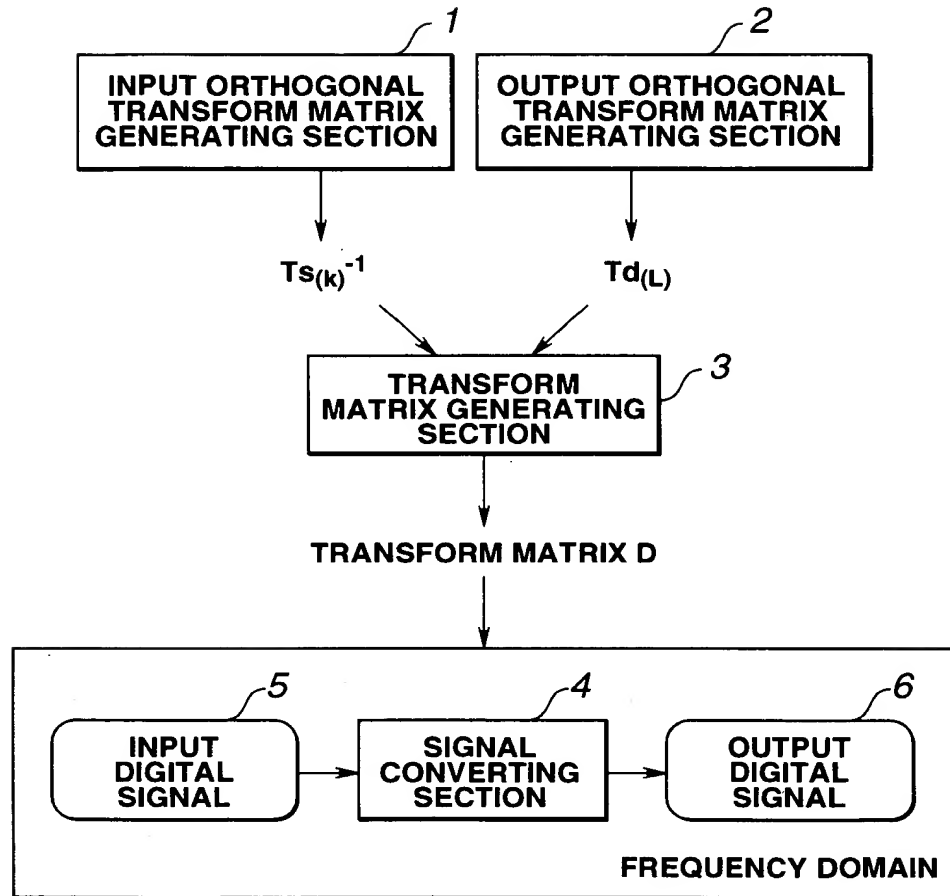


FIG.2

3/27

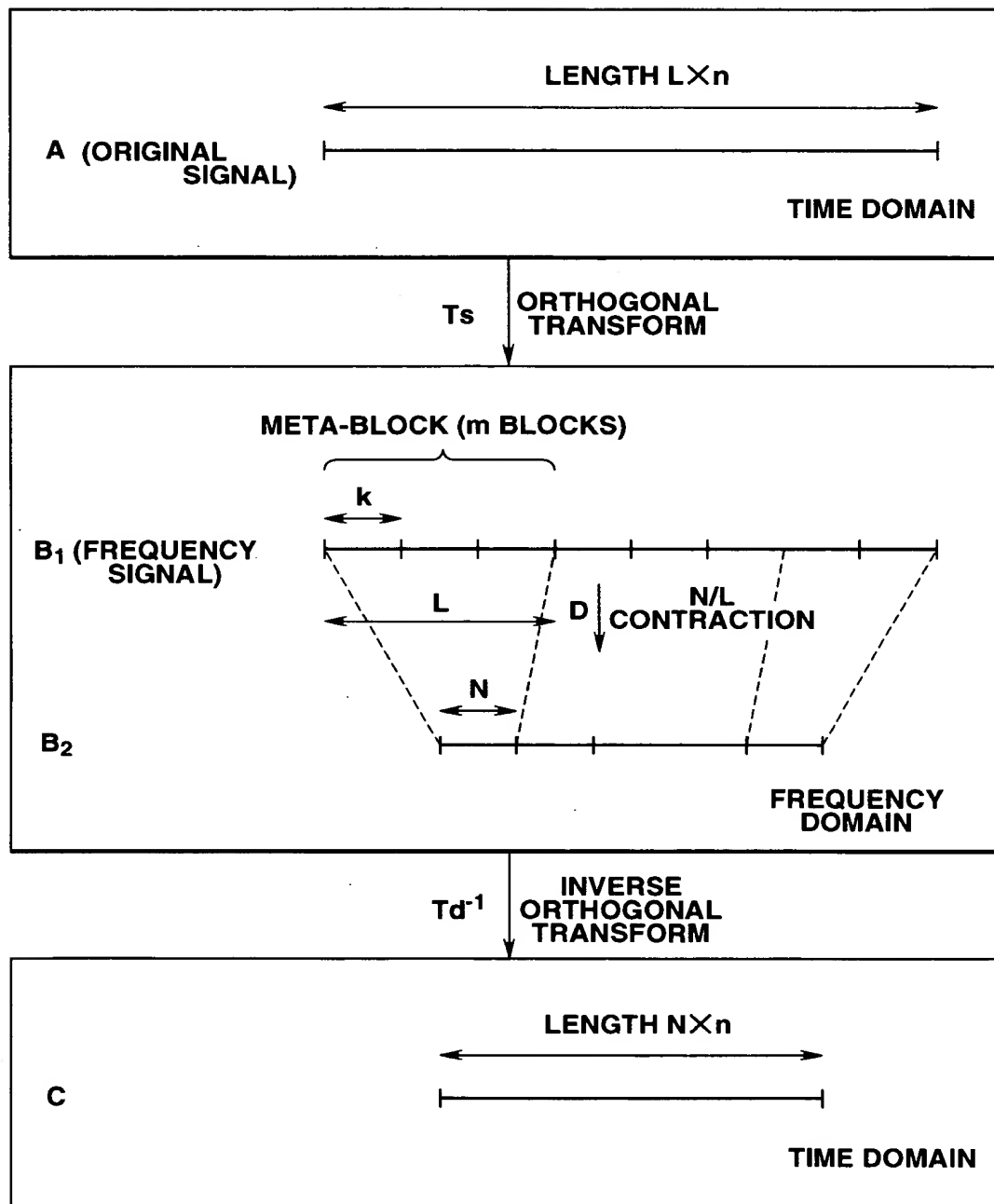


FIG.3



09/341401

09/341401

4/27

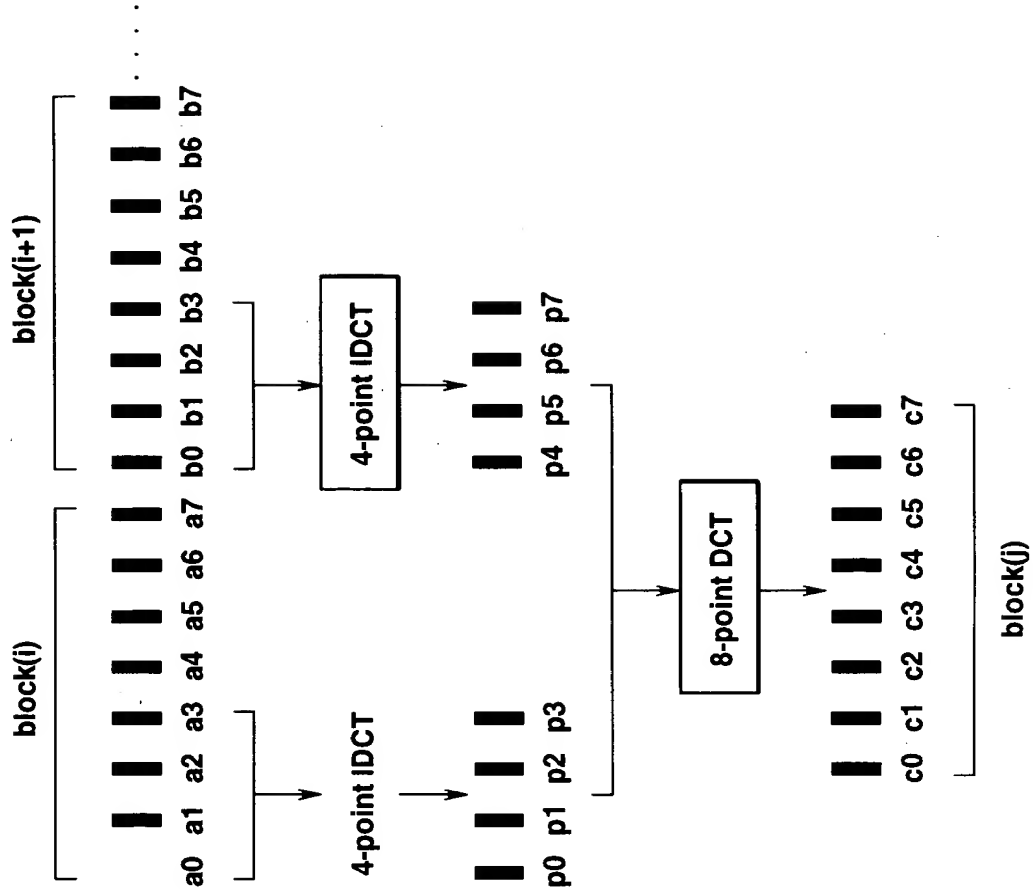


FIG.4A

FIG.4B

FIG.4C

5/27

DV FORMAT	MPEG1 (4 : 2 : 0)	MPEG2 (4 : 2 : 0)
<p>NTSC</p> <p>Y 480 720</p> <p>Cr 180 180</p> <p>Cb 180 180</p> <p>4 : 1 : 1</p>	<p>Y 240 360</p> <p>Cr 120 180</p> <p>Cb 120 180</p> <p>Y HORIZONTAL DIRECTION : 1/2 Y VERTICAL DIRECTION : 1/2</p> <p>C HORIZONTAL DIRECTION : NO CHANGE C VERTICAL DIRECTION : 1/4</p>	<p>Y 480 720</p> <p>Cr 240 360</p> <p>Cb 240 360</p> <p>Y HORIZONTAL DIRECTION : NO CHANGE Y VERTICAL DIRECTION : NO CHANGE</p> <p>C HORIZONTAL DIRECTION : DOUBLE C VERTICAL DIRECTION : 1/2</p>
<p>PAL</p> <p>Y 576 720</p> <p>Cr 288 360</p> <p>Cb 288 360</p> <p>4 : 2 : 0</p>	<p>Y 288 360</p> <p>Cr 144 180</p> <p>Cb 144 180</p> <p>Y HORIZONTAL DIRECTION : 1/2 Y VERTICAL DIRECTION : 1/2</p> <p>C HORIZONTAL DIRECTION : 1/2 C VERTICAL DIRECTION : 1/2</p>	<p>Y 576 720</p> <p>Cr 288 360</p> <p>Cb 288 360</p> <p>Y HORIZONTAL DIRECTION : NO CHANGE Y VERTICAL DIRECTION : NO CHANGE</p> <p>C HORIZONTAL DIRECTION : NO CHANGE C VERTICAL DIRECTION : NO CHANGE</p>

FIG.5

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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09/341401

6/27

$$\begin{bmatrix} c0 \\ c1 \\ c2 \\ c3 \\ c4 \\ c5 \\ c6 \\ c7 \end{bmatrix} = \begin{matrix} (8) \\ \text{DCT8} \end{matrix} \begin{matrix} (8) \\ \text{DCT8} \end{matrix} \begin{bmatrix} (4) & (4) \\ \text{IDCT4} & 0 \\ \hline 0 & \text{IDCT4} \end{bmatrix} \begin{bmatrix} a0 \\ a1 \\ a2 \\ a3 \\ \hline b0 \\ b1 \\ b2 \\ b3 \end{bmatrix}$$

TRANSFORM MATRIX D

FIG.6

SECRET FORTHEN

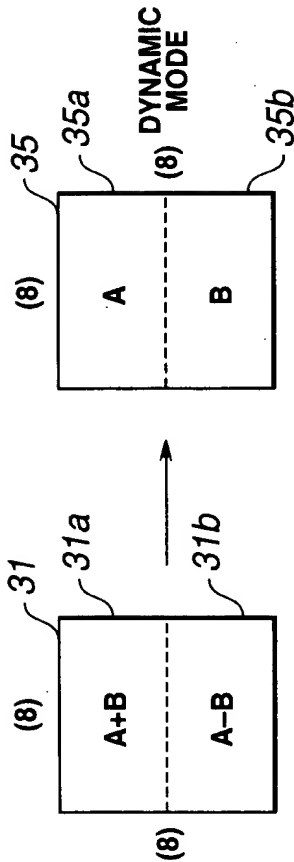


FIG. 7A

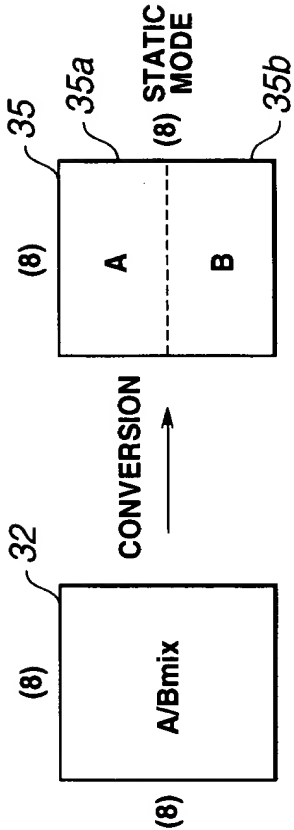


FIG. 7B

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
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0001 100

0001 100

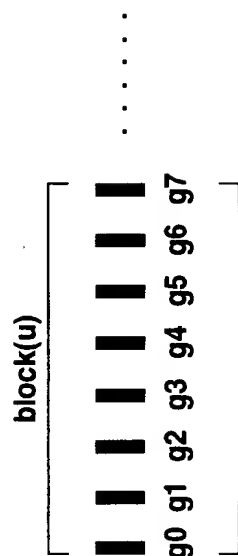
09/341401

8/27

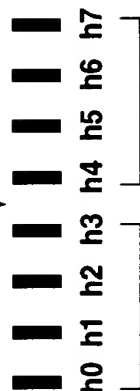
$$\begin{bmatrix} e_0 \\ e_1 \\ e_2 \\ e_3 \end{bmatrix} = \begin{bmatrix} (4) & & & (4) \\ DCT4 & & 0 & \\ & & & DCT4 \\ & 0 & & \end{bmatrix} \begin{bmatrix} (8) \\ (8) \\ (8) \\ (8) \end{bmatrix} = \begin{bmatrix} (8) \\ (8) \\ (8) \\ (8) \end{bmatrix} \begin{bmatrix} d_0 \\ d_1 \\ d_2 \\ d_3 \\ d_4 \\ d_5 \\ d_6 \\ d_7 \end{bmatrix}$$

FIG.8

9/27



8-point DCT



4-point IDCT

4-point IDCT

block(v+1)

block(v)

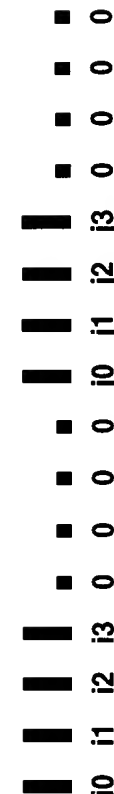


FIG.9A

FIG.9B

FIG.9C

10/27

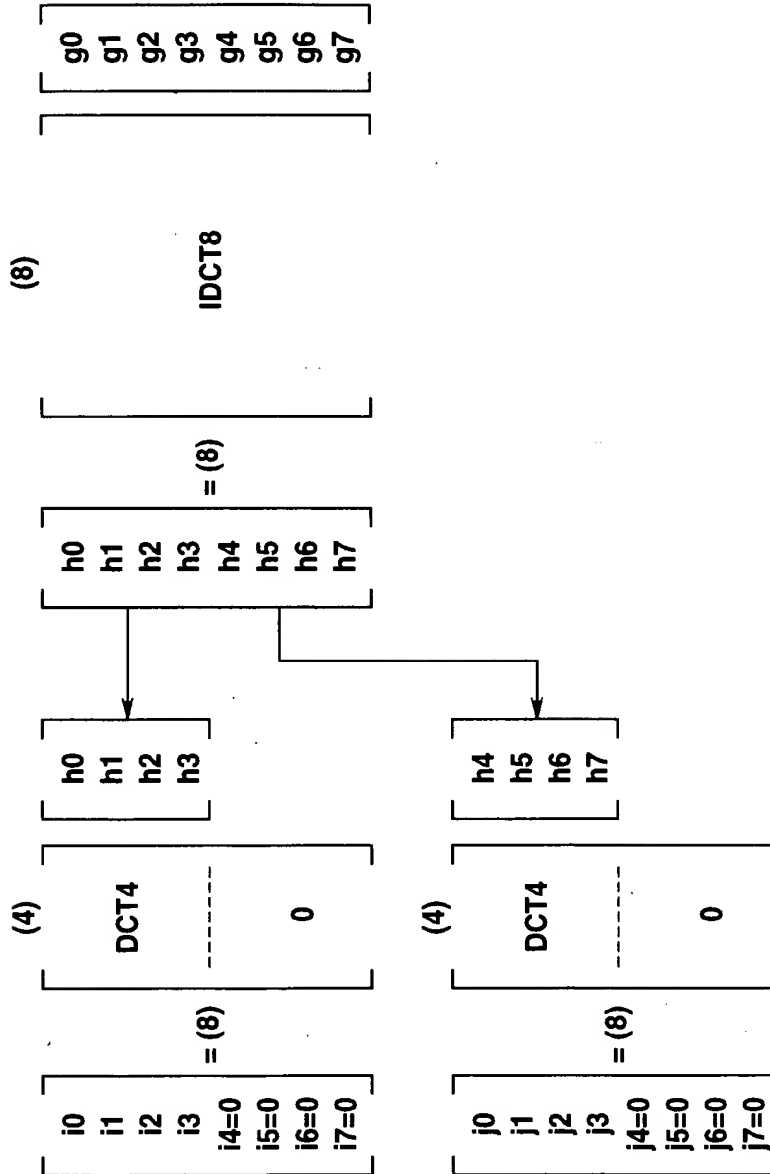
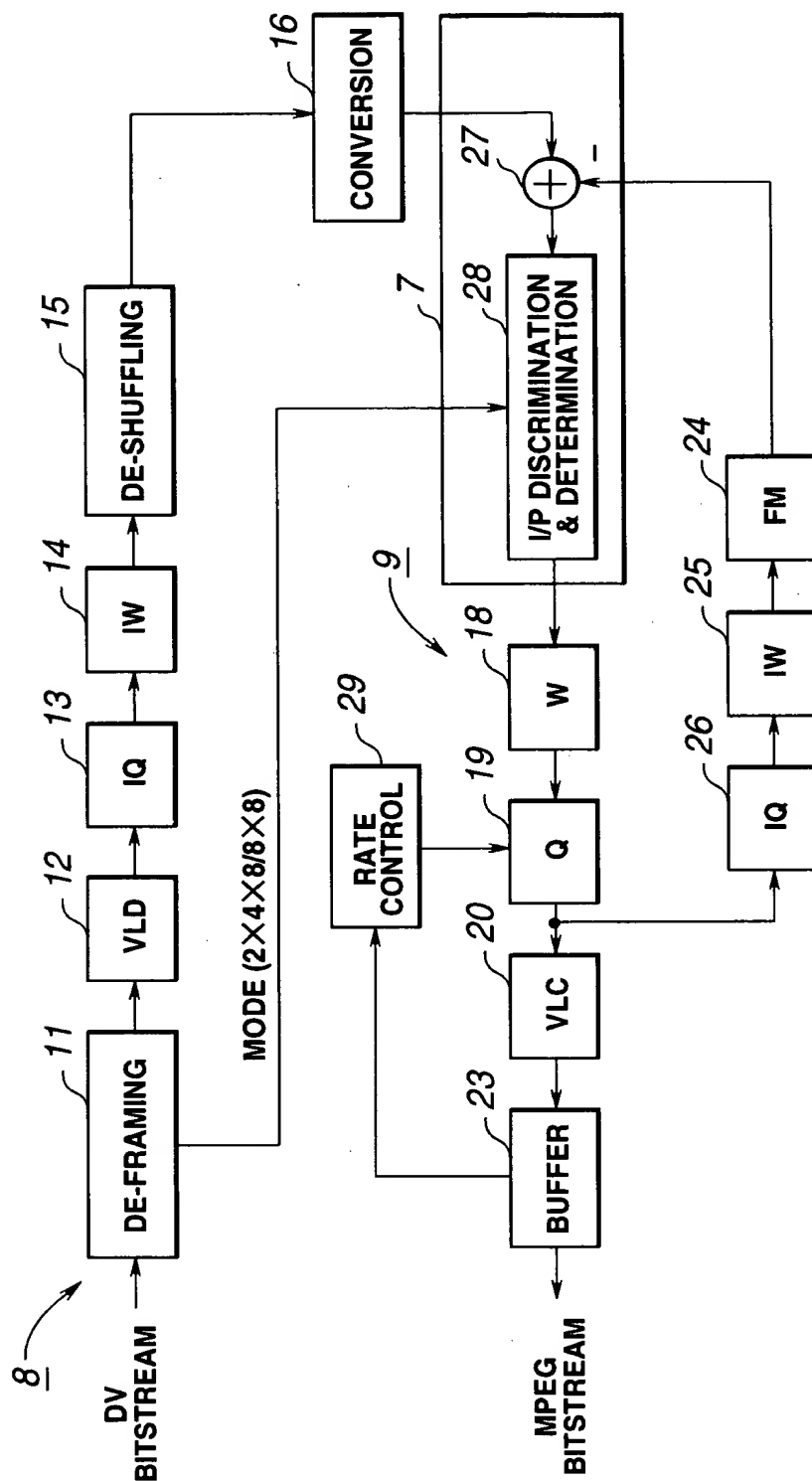


FIG.10

09/341401

FIG. 13



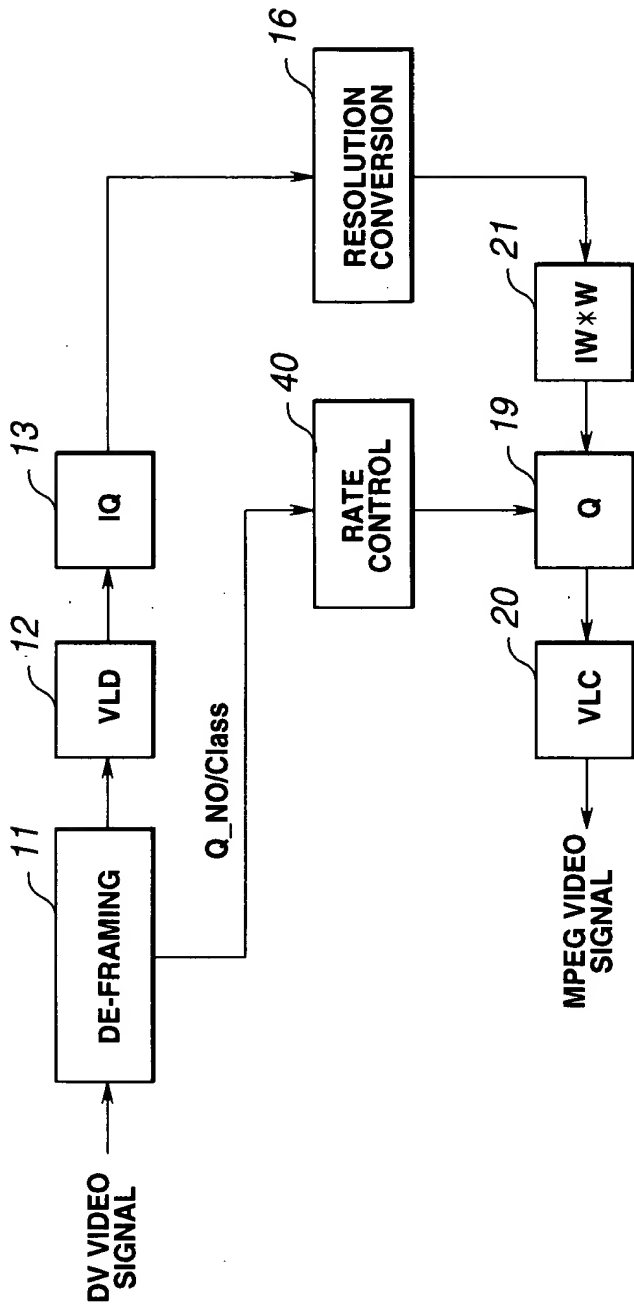


FIG.15

APPROVED	O.G. FIG.	
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09/341401

16/27

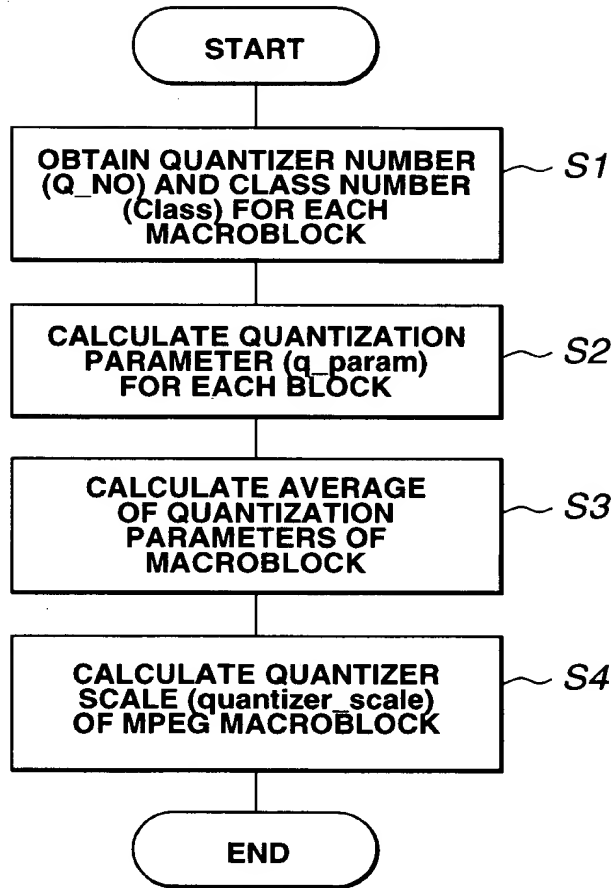


FIG.16

18/27

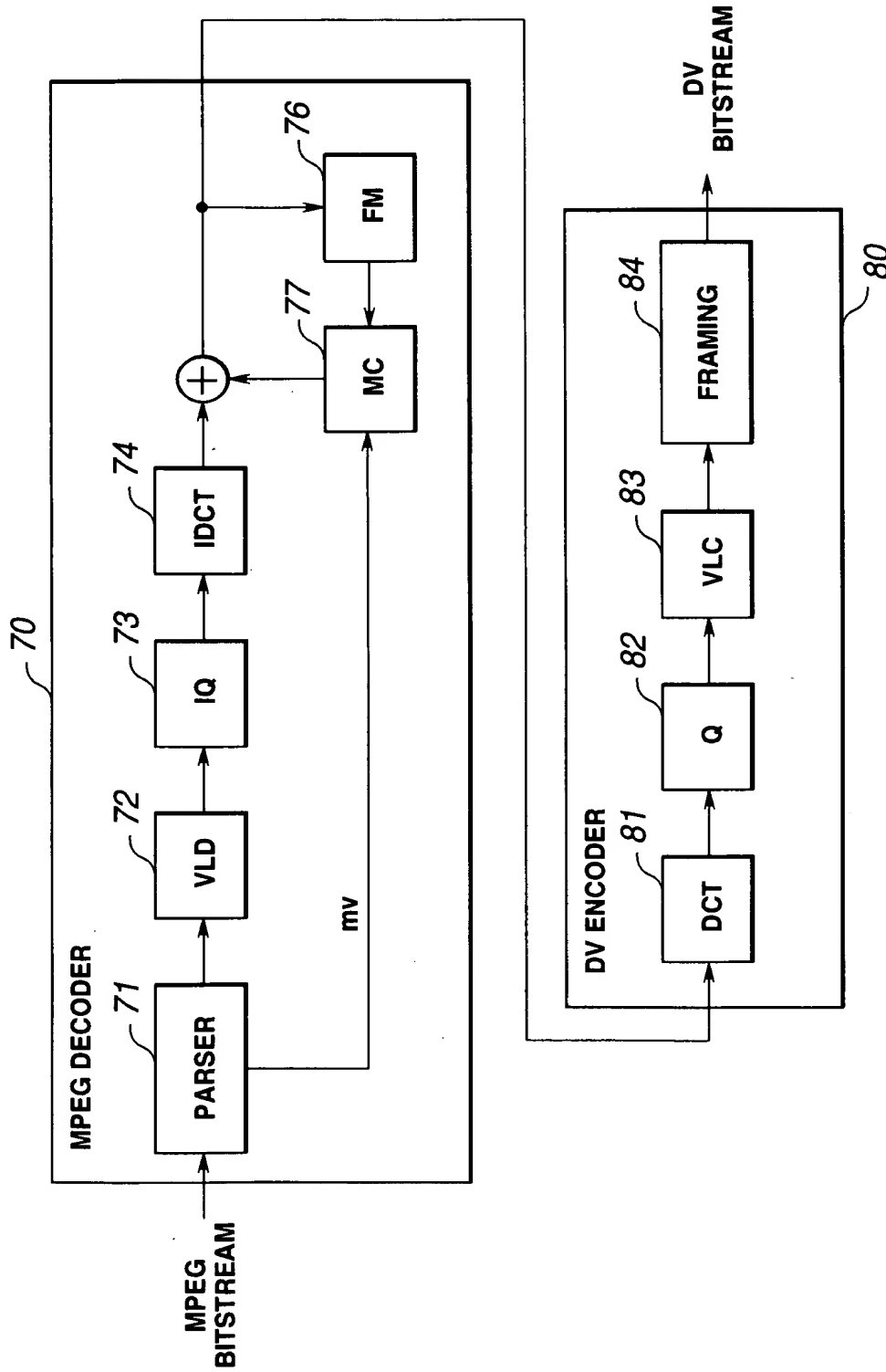


FIG.18

20/27

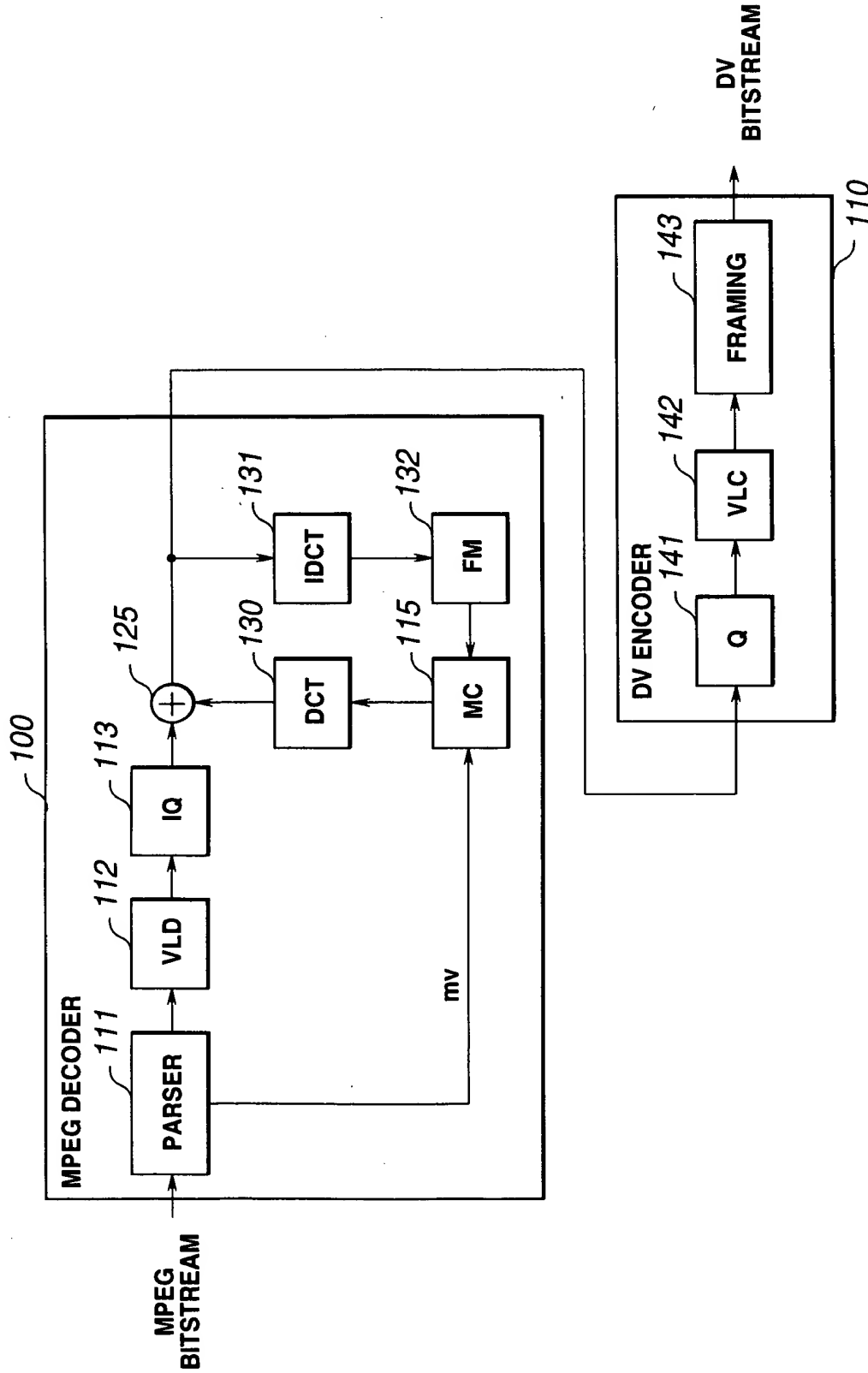


FIG.20

21/27

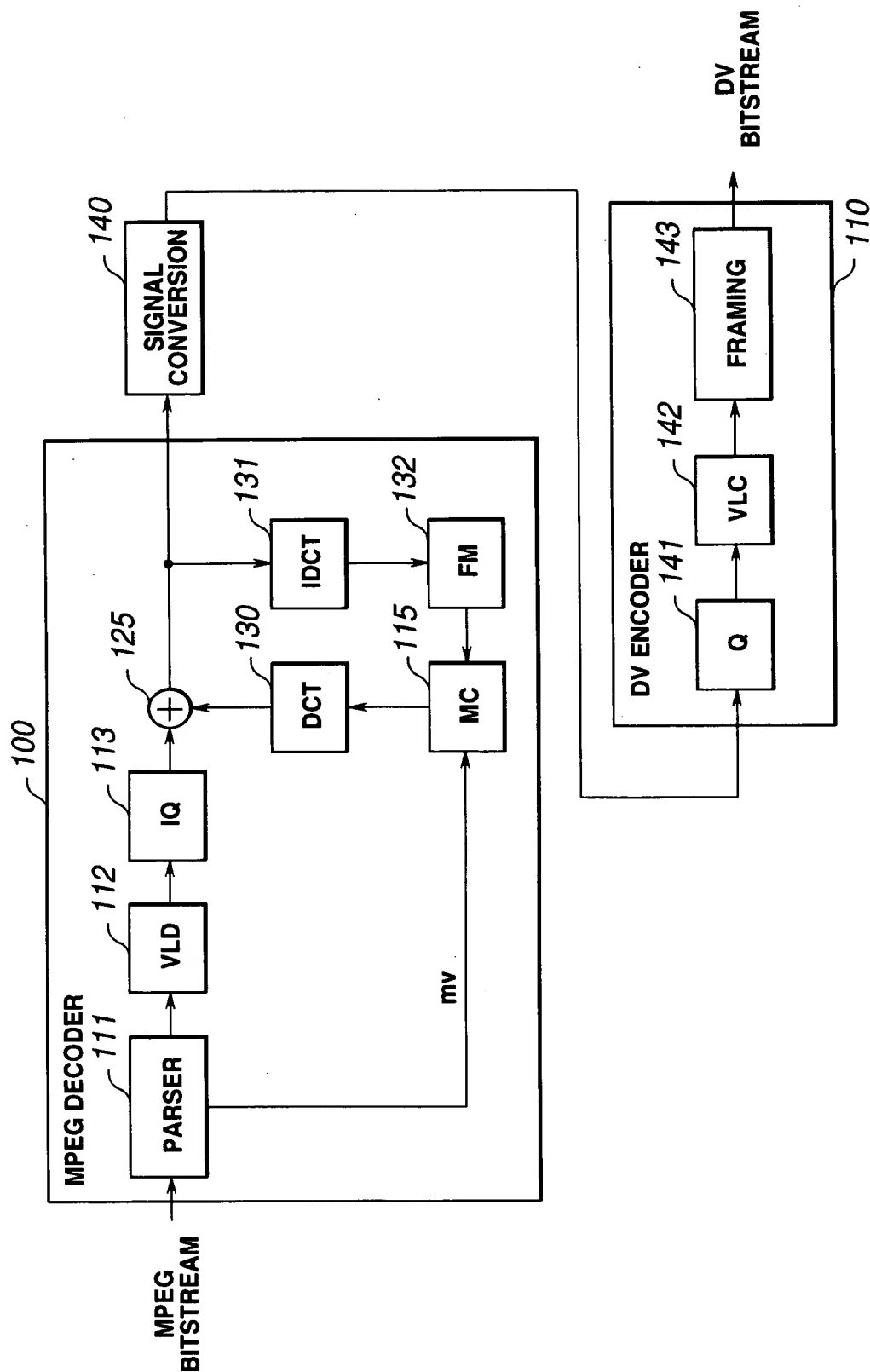


FIG.21



24/27

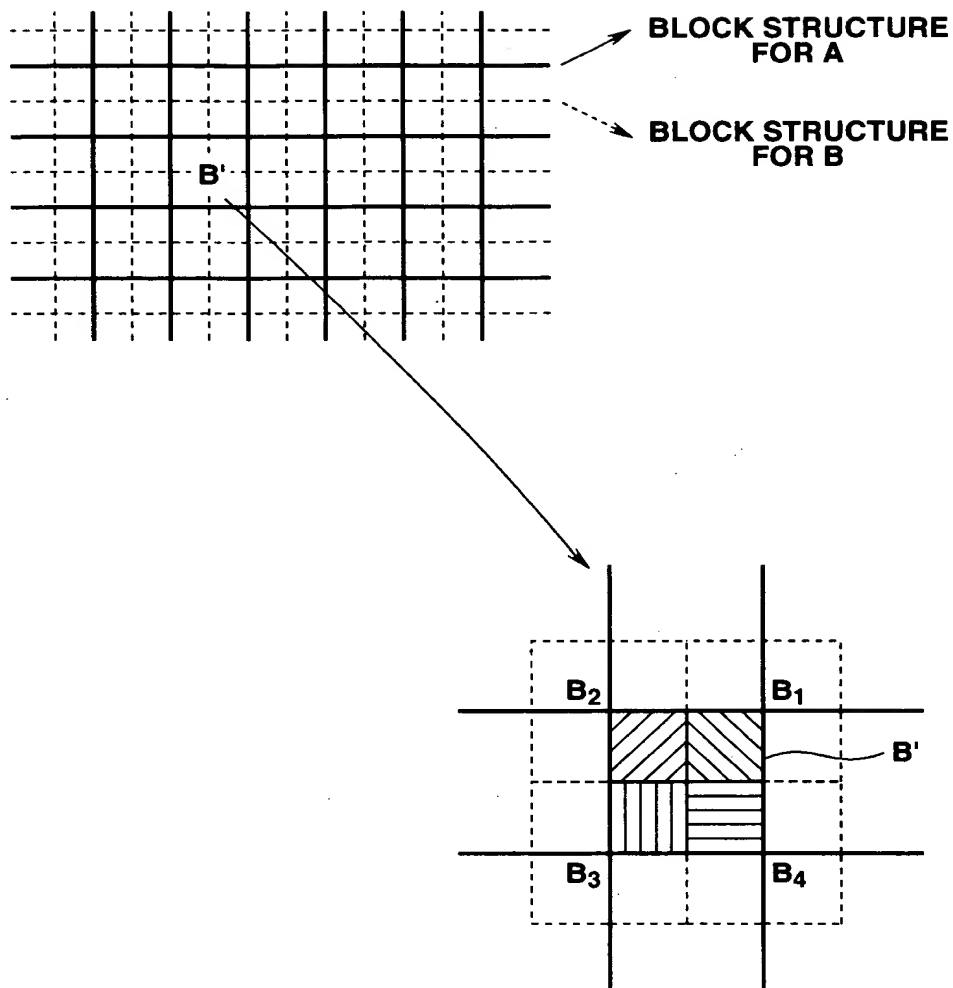


FIG.24

25/27

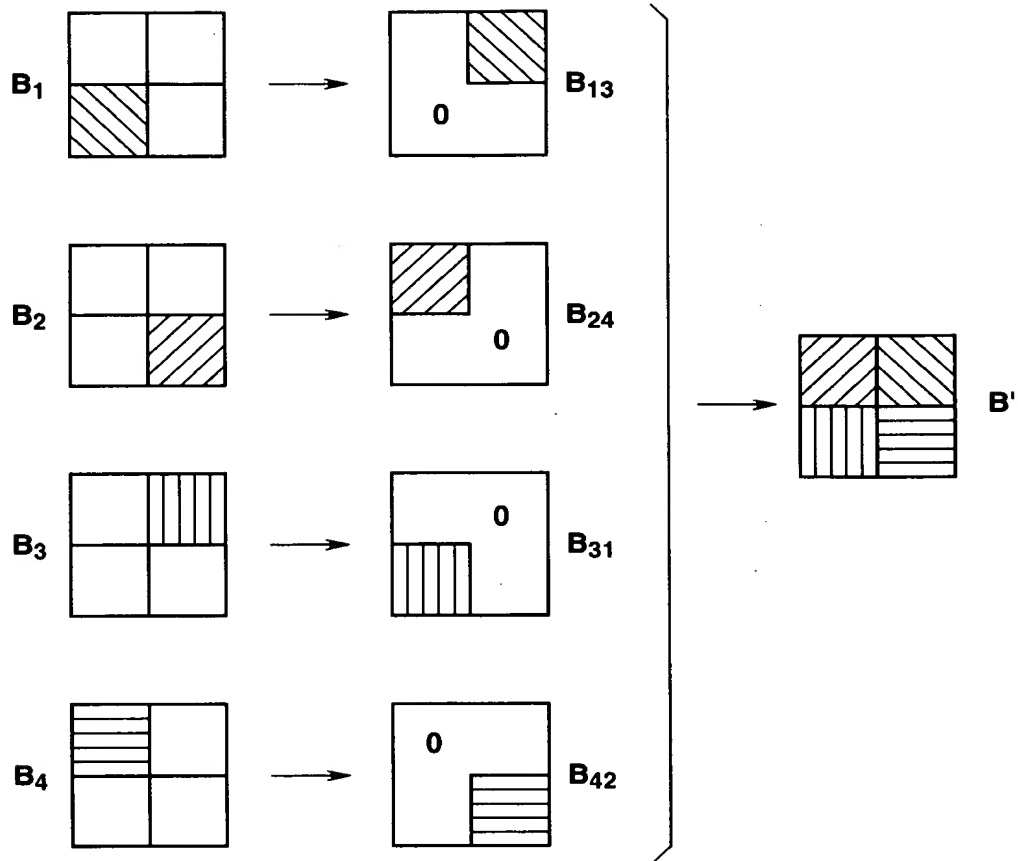


FIG.25

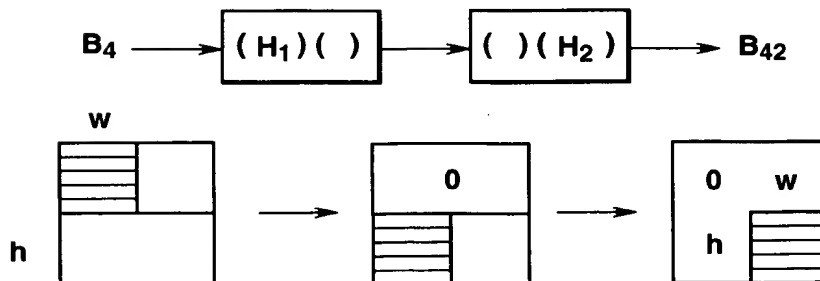


FIG.26

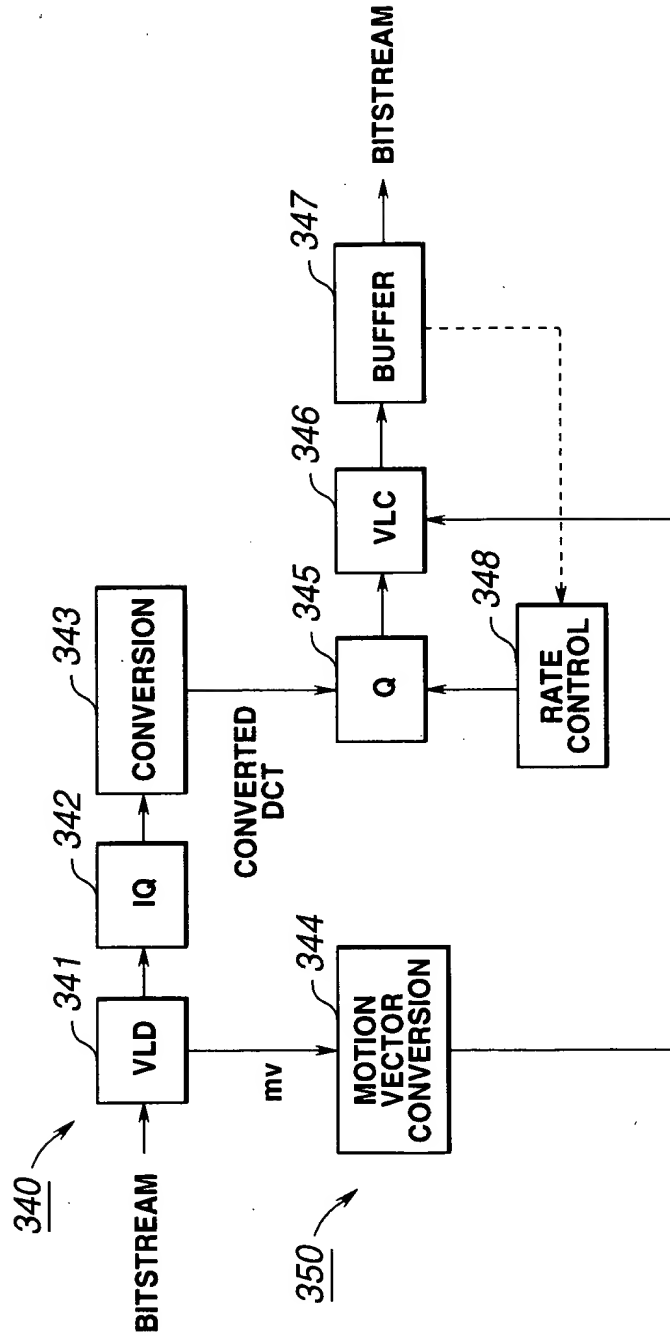


FIG.27



FIG. 28